Distributional Effects of Alternative Social Security Reforms: Details Matter

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Social Security is on an unsustainable path. With average life spans increasing, the working-age population is not growing fast enough to support the growing number of retirees at current benefit levels and tax rates. By sometime later this decade, according to the Social Security trustees, benefit payments will outstrip payroll tax revenue every year for the foreseeable future (Social Security Trustees 2009).[1] Benefit cuts, revenue enhancements, or some combination could return the system to balance. The arithmetic is fairly straightforward, but the impact on future retirees depends crucially on how we cut benefits or increase revenues.

This factsheet shows the distributional effects of some benefit-cut and revenue-enhancement options on future retirees (see table 1, next page). Benefit cuts include reducing cost-of-living adjustments (COLAs), increasing Social Security's full retirement age (FRA), and curbing growth in benefits by relating future payouts to price rather than wage changes. Revenue enhancements include increasing the Social Security payroll tax rate and the earnings base subject to the payroll tax. These policy options are not necessarily better than others and represent only a small portion of the full range of possible reforms. We chose them to illustrate how the distributional consequences of Social Security reform depend on the option policymakers pursue to restore system solvency.

Results are based on DYNASIM3, the Urban Institute's dynamic microsimulation model.[2] For each benefit reduction option, we show the impact on average benefits in 2030 and 2050 by age and lifetime earnings. We also take a lifetime perspective, showing for each option the effect on payout (the ratio of lifetime benefits to contributions) by lifetime earnings.

Effects on Social Security Solvency

- The COLA cut and the PPI proposal would both substantially reduce Social Security's 75-year deficit (figure 1).[3] Increasing the FRA to 68 would have a much smaller impact (although increasing the FRA further or indexing it to increases in longevity would lead to more savings).
- Raising the payroll tax rate would eliminate about half of the 75-year deficit. Raising the taxable earnings cap would eliminate a smaller fraction. These effects are sensitive to economic conditions. (Savings would be greater for options that imposed steeper increases or that increased taxes on higher earners without allowing them to accrue additional benefits.)
- Because the savings from each proposal differ so much, we focus on relative changes across age and earnings groups, not absolute differences in benefit receipt and ratio of benefits to contributions.
- When different payroll tax and benefit provisions are combined, their effects do not necessarily add together because some provisions may interact with each other.

[1] Payroll tax revenues already fall short of benefits in 2010 because high unemployment is depressing tax receipts, but they will likely exceed benefits again for a few years once the economy recovers.

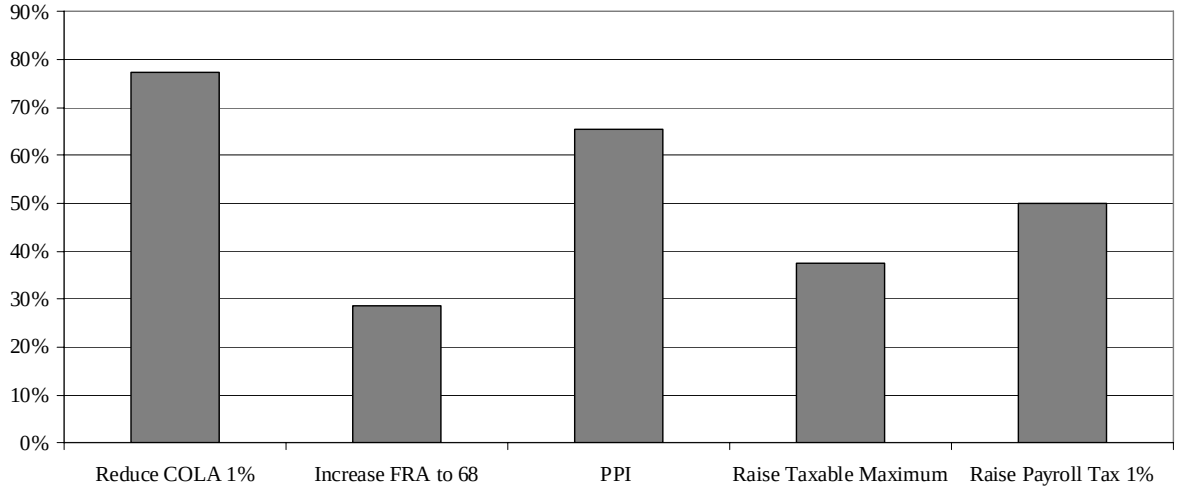
[2] For more information on DYNASIM3, see Favreault and Smith (2004).

[3] Congressional Budget Office projections of these effects differ from Social Security Administration projections reported in the figure.

Table 1. Simulated Policy Options

Benefit Cuts	**Description**
(1) Reduce COLAs	*Current law*: Once benefits begin, they increase each year by the change in the consumer price index (CPI). *Option*: Reduce COLAs by 1 percentage point each year, starting in 2010. *Rationale*: Some evidence suggests that the CPI overstates true price hikes.
(2) Increase the FRA	*Current law*: FRA is 66 for those age 62 today and will increase to 67 beginning with those turning age 62 in 2022. *Option:* Gradually increase FRA beginning in 2010 until it reaches 68 for those turning 62 in 2022 and later. *Rationale*: Longevity gains are increasing lifetime benefit payouts.
(3) Switch to progressive price indexing (PPI)	*Current law*: Initial benefits are tied to changes in the average wage, so that benefits replace roughly the same share of earnings for each generation. *Option*: Tie benefit growth to the change in prices instead of wages, but maintain wage-indexed benefits for retirees with low lifetime earnings (bottom 30 percent of the distribution), beginning with those turning age 62 in 2012. *Rationale*: The growth in real benefits would slow over time, but the system would move away from its traditional role of replacing earnings in retirement; real benefits would continue to grow for retirees with limited lifetime earnings.
Revenue Increases	
(1) Increase taxable maximum	*Current law*: Contributions and future benefits are based only on earnings that fall below an annual cap that currently covers about 84 percent of all earnings. *Option*: Increase the taxable maximum to cover 90 percent of all earnings, effective in 2010; count these additional contributions toward benefits. *Rationale*: The share of earnings covered by the cap has fallen over time; increasing it would raise revenues more than benefits because the benefit formula is progressive.
(2) Increase payroll tax rate	*Current law*: Social Security's payroll tax is currently 12.4 percent, split equally between workers and employers. *Option*: Increase the payroll tax by 1 percentage point, effective in 2010.

Figure 1. Percent Reduction in the 75-Year Social Security Deficit under Selected Policy Changes

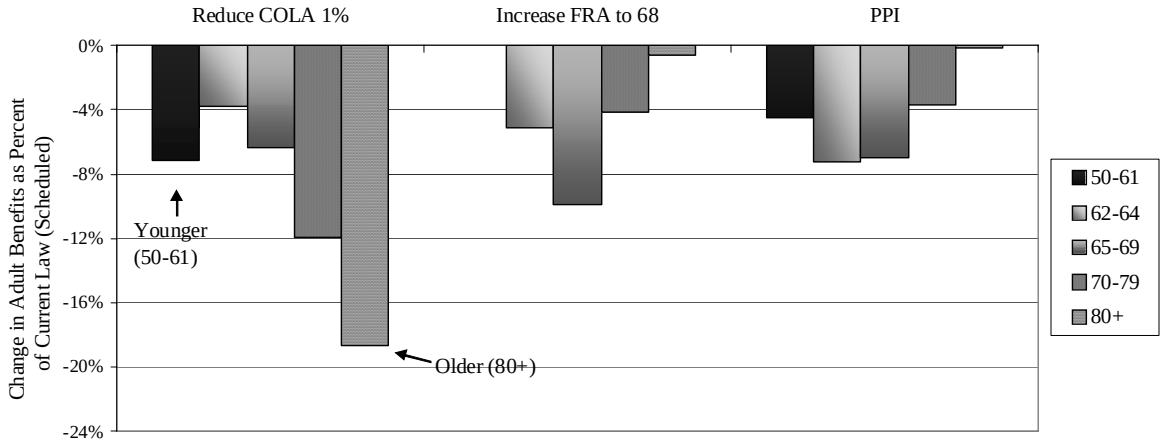


Source: Office of the Chief Actuary, Social Security Administration, based on 2009 trustees' assumptions, plus Urban Institute calculations.
Phase-in provisions differ modestly from the options simulated here, so their costs would differ.

Distributional Impact of Benefit Cuts

We show how the impact of each benefit reduction option on benefits received in 2030 and 2050 (relative to benefits scheduled under current law) varies by the age and lifetime earnings of beneficiaries. Because the full effect of some options do not become apparent for decades, it is important to examine long-run outcomes. If current law continues without any reforms, scheduled benefits in 2050 will exceed system revenues, allowing Social Security to pay only 76 percent of scheduled benefits.

Figure 2. Benefit Reduction by Age, 2030

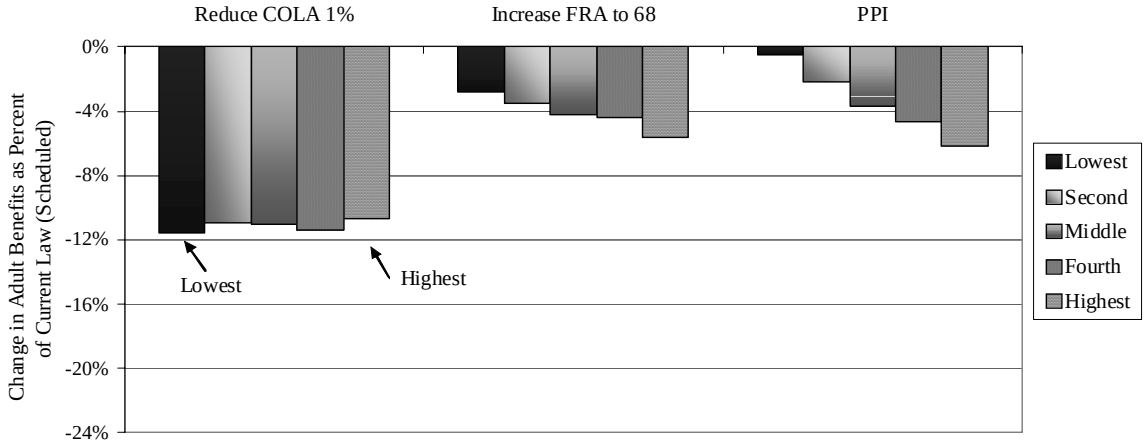


Source: The Urban Institute Retirement Policy Program, based on DYNASIM3 (run 614, April 2009, using 2008 trustees' assumptions).

Age Differences

- Reducing COLAs would hit the oldest beneficiaries hardest (figure 2), because cuts cumulate over time. However, benefits would also fall substantially for disabled beneficiaries age 50 to 61, many of whom have been receiving payments for many years.
- The COLA reduction would cut benefits for the oldest beneficiaries more in 2050 than 2030 because virtually no one would have experienced the higher COLA in effect before 2010 (figure 3). For beneficiaries age 80 and older, benefit cuts under the COLA reduction would exceed the across-the-board cuts they would experience if current law continued without any reforms.

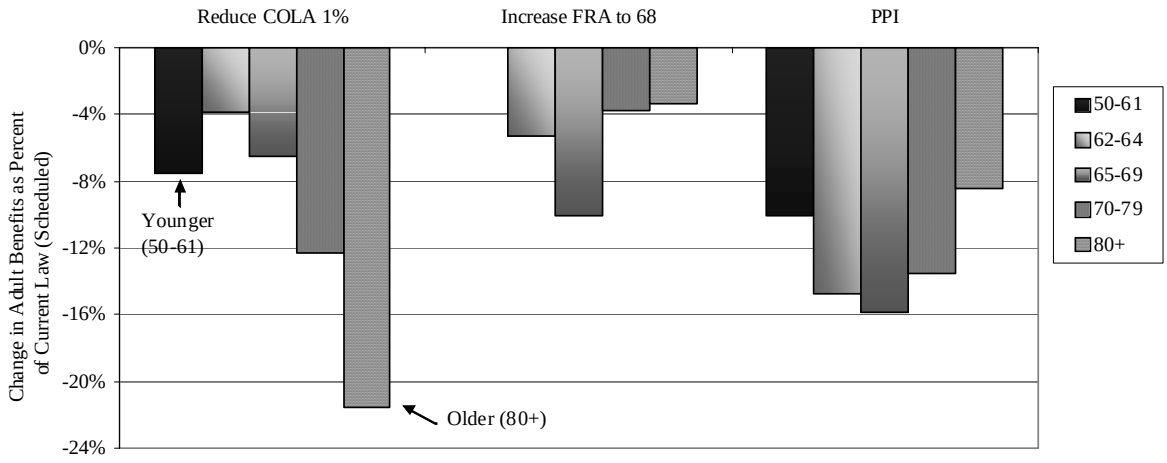
Figure 3. Benefit Reduction by Lifetime Earnings, 2030



Source: The Urban Institute Retirement Policy Program, based on DYNASIM3 (run 614, April 2009, using 2008 trustees' assumptions).

- Increasing the FRA would not reduce payments to disabled beneficiaries. The impact on retirees age 80 and older would be very small in 2030 because they would have reached age 62 before 2010, when the changes would first go into effect. The impact would be larger in 2050.
- Increasing the FRA to 68 would most reduce payments to beneficiaries age 65 to 69, because it would subject more beneficiaries in that age range to the retirement earnings test (RET). The RET reduces payments to employed beneficiaries younger than the FRA who earn more than a certain amount. However, payments to beneficiaries subject to the RET generally increase once they stop working, fully offsetting the loss in benefits.
- The PPI proposal would not affect the oldest beneficiaries in 2030 who turned 62 after 2012, when the changes would go into effect. By 2050, however, the impacts would be sizeable.

Figure 4. Benefit Reduction by Age, 2050

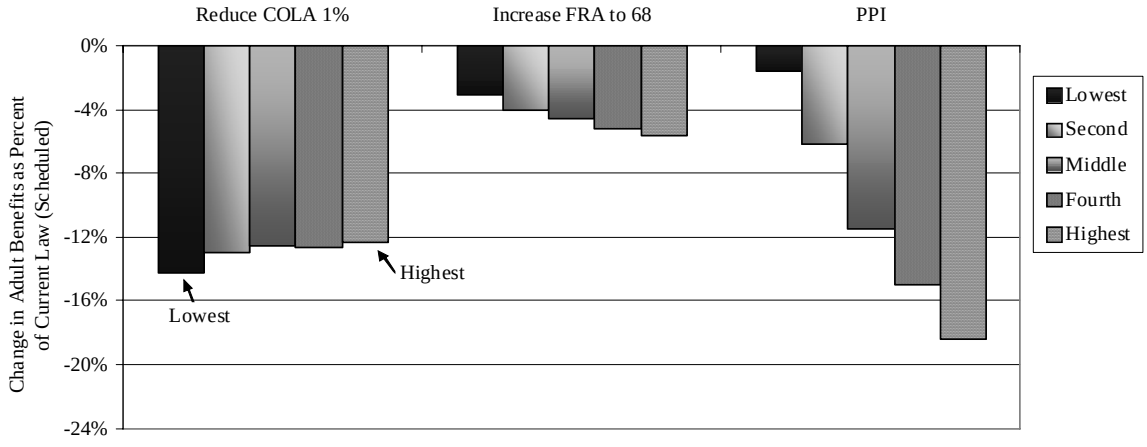


Source: The Urban Institute Retirement Policy Program, based on DYNASIM3 (run 614, April 2009, using 2008 trustees' assumptions).

Earnings Differences

- The effects of COLA reductions would not differ much by earnings (figures 4 and 5).
- Benefit reductions from an increase in the FRA would increase with lifetime earnings, primarily because FRA increases exempt disabled workers, who on average have lower lifetime earnings. The temporary RET reductions also play a role.

Figure 5. Benefit Reduction by Lifetime Earnings, 2050



Source: The Urban Institute Retirement Policy Program, based on DYNASIM3 (run 614, April 2009, using 2008 trustees' assumptions).

- In 2050, the PPI proposal would reduce benefits substantially for beneficiaries in the top three-fifths of the lifetime earnings distribution, but those in the bottom fifth would experience only modest cuts. (We classify beneficiaries on the basis of shared family earnings, whereas the PPI proposal would use individual earnings. As a result, benefits would fall for some beneficiaries who are in the bottom quintile of family earnings but not in the bottom 30 percent of individual earnings.)

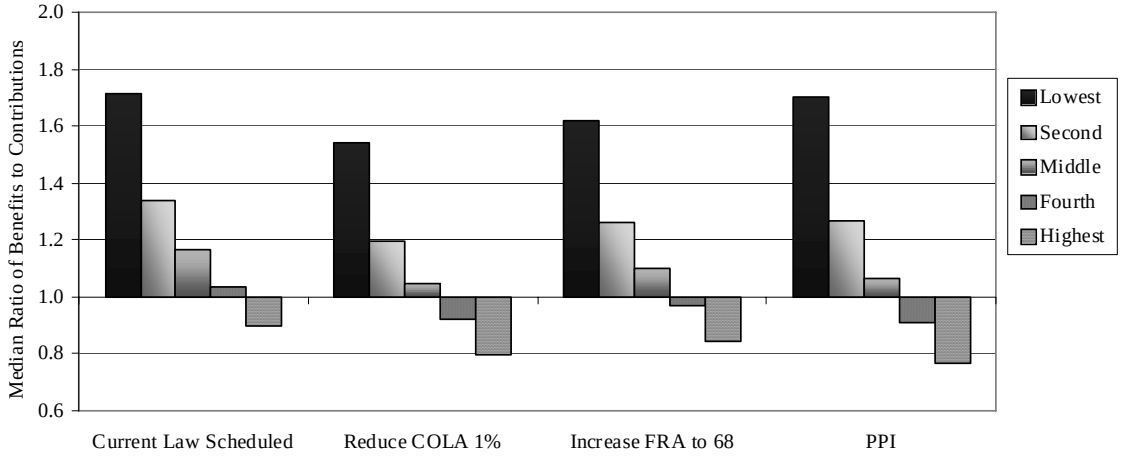
Distributional Impact on Ratio of Benefits to Contributions

It is important to examine the impact of policy changes over a lifetime, not just in a single year. Figures 6 and 7 show how the ratio of lifetime benefits to lifetime contributions varies by lifetime earnings for each policy option. The estimates are for workers born 1965 to 1972 (and age 38 to 45 in 2010).

- Under current law, Social Security is quite progressive. Workers with low lifetime earnings receive benefits that substantially exceed their contributions. Workers in the second and third quintiles also earn sizeable returns from the system. However, workers in the top fifth of the earnings distribution pay more in taxes than they receive in benefits.
- Each benefit reduction policy option reduces the returns workers receive on their contributions but maintains the system's overall progressivity. The PPI proposal would boost overall progressivity because it would maintain current-law benefits for workers with the lowest lifetime earnings, though at the cost of markedly reduced replacement rates for many higher earners.
- Similarly, increasing the taxable maximum and raising the raising the payroll tax rate would cut returns but not substantially change the system's progressivity for those born 1965 to 1972. (Increased progressivity is more apparent for the taxable maximum option when we examine earnings deciles rather than quintiles.)

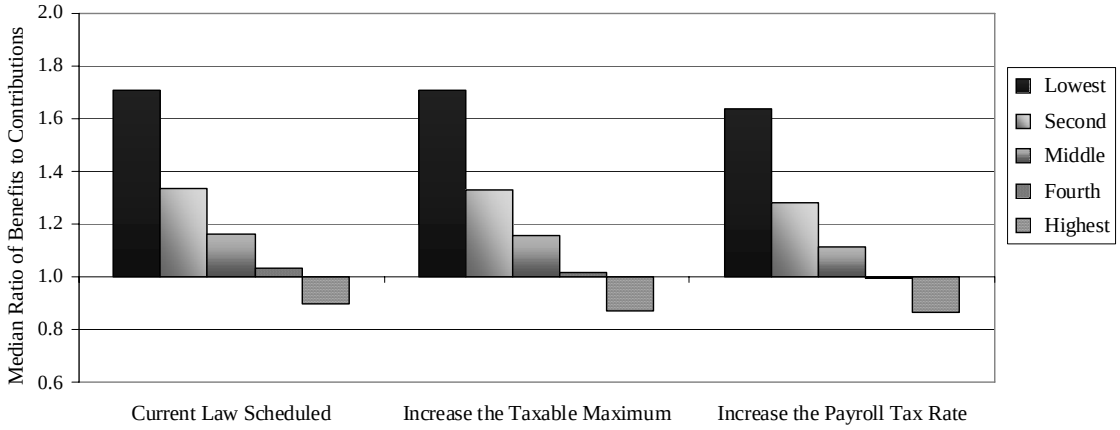
We chose to show results for this generation because they would experience many of these Social Security changes for a significant part of their career. Policymakers should also compare these ratios for other generations, especially for proposals that direct greater fractions of tax and benefit changes to future generations of workers (such as some price indexing proposals and payroll tax proposals that phase in over the next few decades, rather than immediately). Examining other outcomes, such as those to poverty, is also useful.

Figure 6. Returns under Benefit Reduction Policy Options by Lifetime Earnings, 1965-72 Birth Cohort



Source: The Urban Institute Retirement Policy Program, based on DYNASIM3 (run 614, April 2009, using 2008 trustees' assumptions).
Note: Estimates assume a 2 percent real interest rate.

Figure 7. Returns under Revenue Enhancement Policy Options by Lifetime Earnings, 1965-72 Birth Cohort



Source: The Urban Institute Retirement Policy Program, based on DYNASIM3 (run 614v2, April 2010, using 2008 trustees' assumptions).

Conclusions

Social Security benefit cuts and revenue-raising options have different effects on workers in different generations, age groups, and with different lifetime earnings. The devil really is in the details. We simulate only a few of the prominent options that have been discussed in the past. The effects shown could be reduced by phasing in the changes more gradually. Combinations of benefit reductions and revenue options could be designed to spread the effects across different groups in various ways. Also, these options could be combined with new ideas to protect the most vulnerable, such as new minimum benefit options (Favreault, Mermin, and Steuerle 2007).

For more information, visit "How Could We Reform Social Security?" on our website (http://www.urban.org/retirement_policy/reform.cfm.)

References

Favreault, Melissa M., and Karen Smith. 2004. "A Primer on the Dynamic Simulation of Income Model (DYNASIM3)." Washington, DC: The Urban Institute.

Favreault, Melissa M., Gordon B. T. Mermin, and C. Eugene Steuerle. 2007. "Minimum Benefits in Social Security." In *Government Spending on the Elderly*, edited by Dimitri B. Papadimtriou (347–88). New York: Palgrave/Macmillan Publishing.

Social Security Trustees. 2009. "2009 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds." Washington, DC: Social Security Trustees.

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